

AMENDMENTS TO THE CLAIMS

1-9. (Cancelled)

10. (Currently amended) An image coding apparatus for coding a plurality of images data corresponding respectively to a plurality of viewpoints, comprising:

a joining means for joining the plurality of images data based on a predetermined joining method;

a coding means for coding a joined image data; and

a 2-dimensional display image generating method coding means for coding a method of ~~generating~~ representing how a 2-dimensional display image is generated from the joined image data.

11. (Cancelled)

12. (Cancelled)

13. (Currently amended) An image decoding apparatus for decoding coded data of joined image data ~~and 2-dimensional display image generating method information~~, the joined image data being formed by joining a plurality of images data corresponding respectively to a plurality of viewpoints, in a predetermined joining method, comprising:

a demultiplexing means for extracting, from coded data being input, the coded joined image data and information representing how a 2-dimensional display image is generated from the joined image data,

a decoding means for decoding the coded joined image data;

a ~~2-dimensional~~ 2-dimensional display image generating method decoding means for decoding the ~~2-dimensional display image generating method information~~; and

~~2-dimensional display image generating method~~ information; and

a ~~2-dimensional~~2-dimensional display image generating means for generating a ~~2-dimensional~~2-dimensional display image, ~~using a from the decoded joined image data and based on a decoded 2-dimensional display image generating method~~ the decoded information.

14. (Cancelled)

15. (Previously presented) The image decoding apparatus according to Claim 13, wherein the 2-dimensional display image is a miniaturized image for displaying a plurality of the joined images data in a menu representation.

16. (Original) A recording medium for storing a plurality of coded images data corresponding respectively to a plurality of viewpoints, together with header information, in a predetermined format, wherein the header portion stores stereo image identification information that represents the fact that the coded data constitutes a stereo image made up of a plurality of images data and information that represents a joining method of joining the plurality of images data.

17. (Currently amended) A recording medium ~~for storing a plurality of coded images data corresponding respectively to a plurality of viewpoints, together with header information, in a predetermined format, wherein comprising:~~

an image data portion for storing encoded joined image data, encoded joined image data being generated by joining a plurality of images data corresponding respectively to a plurality of viewpoints and by encoding the joined image data, and

a header portion for storing header information with respect to the encoded joined image data.

the header portion ~~stores comprising:~~

stereo image identification information that represents the fact that the ~~encoded~~-encoded joined image data constitutes a stereo image made up of the plurality of images data, and

control information including information ~~indicating a method of generating representing how a~~
~~2-dimensional~~2-dimensional display image is generated from the ~~encoded~~-encoded joined image data.

18. (Currently amended) The recording medium according to Claim 16, wherein the header portion is repeatedly ~~multiplexed to the coded data~~ stored in the image data portion.

19. (Currently amended) The image decoding apparatus according to Claim 13, further comprising a display means capable of switching between a stereo representation and a ~~2-dimensional~~-2-dimensional representation.

20. (Currently amended) The image decoding apparatus according to Claim 19, wherein automatic switching is done between the stereo representation and the ~~2-dimensional~~2-dimensional representation, based on ~~the information stored in the~~ a header portion.

21-24. (Cancelled)

25. (Currently amended) An image recording apparatus for recording a plurality of images data corresponding respectively to a plurality of viewpoints, into a recording area, comprising:

a joining means for joining the plurality of images data using a predetermined joining method;
and

a 2-dimensional display image generating method coding means for encoding a 2-dimensional

display image generating method of generating-representing how a 2-dimensional display image data is generated from a the joined image data,

wherein the recording area includes:

- an image recording sector for recording the joined image data or the 2-dimentsional image data;
- an audio recording sector for recording an audio data; and
- a subcode sector for recording an associated information.

26. (Currently amended) An image recording apparatus for recording a plurality of images data corresponding respectively to a plurality of viewpoints, into a recording area, comprising:

a joining means for joining the plurality of images data using a predetermined joining method;
and

a 2-dimensional display image generating method coding means for encoding a 2-dimensional display image generating method of generating-representing how a 2-dimensional display image data is generated from a the joined image data,

wherein the recording area includes an image recording sector for recording the joined image data or a the 2-dimentsional2-dimensional image data, and a coded data of the 2-dimensional display image generating method information of generating the 2-dimensioal display image is recorded in the image recording sector.

27. (Currently amended) An image recording apparatus for recording a plurality of images data corresponding respectively to a plurality of viewpoints, into a recording area, comprising:

a joining means for joining the plurality of images data using a predetermined joining method;
and

a 2-dimensional display image generating method coding means for encoding a 2-dimensional

display image generating method of generating representing how a 2-dimensional display image data is generated from a-the joined image data,

wherein the recording area includes an audio recording sector for recording an audio data, and a coded data of the 2-dimensional display image generating method information of generating the 2-dimensional display image is recorded in the audio recording sector.

28. (Currently amended) An image recording apparatus for recording a plurality of images data corresponding respectively to a plurality of viewpoints, into a recording area, comprising:

a joining means for joining the plurality of images data using a predetermined joining method;
and

a 2-dimensional display image generating method coding means for encoding a 2-dimensional display image generating method of generating representing how a 2-dimensional display image data is generated from a-the joined image data,

wherein the recording area includes a subcode sector for recording an associated information, and a coded data of the 2-dimensional display image generating image information of generating the 2-dimensional display image is recorded in the subcode recording sector.

29. (Previously presented) The recording medium according to Claim 17, wherein the header portion is repeatedly multiplexed to the coded data.

30. (Currently amended) The image decoding apparatus according to Claim 15, further comprising a display means capable of switching between a stereo representation and a ~~2-dimensional~~ 2-dimensional representation.